



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

**EP 0 857 007 A1**

(12)

**EUROPEAN PATENT APPLICATION**

published in accordance with Art. 158(3) EPC

(43) Date of publication:

**05.08.1998 Bulletin 1998/32**

(51) Int. Cl.<sup>6</sup>: **H05B 33/14**

**// C09K11/06**

(21) Application number: **97935819.9**

(86) International application number:

**PCT/JP97/02869**

(22) Date of filing: **19.08.1997**

(87) International publication number:

**WO 98/08360 (26.02.1998 Gazette 1998/08)**

(84) Designated Contracting States:  
**DE FR GB NL**

(30) Priority: **19.08.1996 JP 235898/96**

(71) Applicant: **TDK Corporation**  
**Chuo-ku, Tokyo 103 (JP)**

(72) Inventors:

- **KOBORI, Isamu**  
**Chuo-ku, Tokyo 103 (JP)**
- **OHISA, Kazutoshi**  
**Chuo-ku, Tokyo 103 (JP)**

• **NAKAYA, Kenji**  
**Chuo-ku, Tokyo 103 (JP)**

• **INOUE, Tetsushi**  
**Chuo-ku, Tokyo 103 (JP)**

(74) Representative:

**Wise, Stephen James et al**  
**c/o RAWORTH, MOSS & COOK,**  
**Raworth House,**  
**36 Sydenham Road**  
**Croydon, Surrey CR0 2EF (GB)**

**(54) ORGANIC ELECTROLUMINESCENT DEVICE**

(57) In an organic EL device, a light emitting layer contains a specific coumarin derivative, and a hole injecting and/or transporting layer contains a specific tetraaryldiamine derivative. Also a light emitting layer in the form of a mix layer contains a specific coumarin derivative, a specific quinacridone compound or a specific styryl amine compound. There are provided at least two light emitting layers including a light emitting layer of the mix layer type wherein at least two dopants are contained so that at least two luminescent species may emit light. There is obtained an organic EL device capable of high luminance and continuous light emission and ensuring reliability. Multi-color light emission becomes possible.

FIG. 1

